

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/644,719	08/20/2003	Kenneth J. Fennewald	94004-88254	6120
28997 75	590 08/17/2006		EXAMINER	
HARNESS, DICKEY, & PIERCE, P.L.C 7700 BONHOMME, STE 400			KASENGE, CHARLES R	
	T. LOUIS, MO 63105		ART UNIT	PAPER NUMBER
			2125	
			DATE MAIL ED: 08/17/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/644,719	FENNEWALD ET AL.				
		Examiner	Art Unit				
		Charles R. Kasenge	2125				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address							
Period for Reply							
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANS INSIGNS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It is period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be time Till apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. sely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status	•						
1)🖾	Responsive to communication(s) filed on 12 Ju	<u>ine 2006</u> .					
,	This action is FINAL . 2b)⊠ This action is non-final.						
3) 🗌	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	ion of Claims						
4)⊠	Claim(s) 1-44 is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠	5)⊠ Claim(s) <u>8-35</u> is/are allowed.						
·	☑ Claim(s) <u>1-5,7 and 36-44</u> is/are rejected.						
,	☐ Claim(s) 6 is/are objected to.						
8)[_	Claim(s) are subject to restriction and/or	relection requirement.					
Applicati	ion Papers						
9)[The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>20 August 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
11)	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	ACTION OF IOTHER TO-152.				
Priority (under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachmen							
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D					
3) 🔲 Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date		Patent Application (PTO-152)				

Application/Control Number: 10/644,719

Art Unit: 2125

DETAILED ACTION

Page 2

Response to Arguments

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-5, 7, and 36-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshida et al. U.S. Patent 6,678,290. Referring to claims 1, 36, 39, 40 and 41, Yoshida discloses a control system that limits the wattage provided by a heat-producing element to a value less than that produced at full line voltage, the system comprising (col. 4, lines 45-57 and col. 8, lines 7-16): at least one heat-producing means (col. 4, lines 22-27 and col. 5, lines 13-19); a power control means operatively associated with said at least one heat-producing means (col. 4, lines 45-57); and a power limiting function that limits the wattage provided by said at least one heat-producing means to a value less than that produced at a full line voltage through the use of a scaling function (col. 5, lines 20-26). The Examiner interprets the "input voltage" as the full line voltage. Since the voltage is scaled down, it inherently disclose Referring to claims 2 and 42-44, Yoshida discloses the control system according to claim 1 wherein said power limiting function

Art Unit: 2125

and said scaling function resides in a module attached to said at least one heat-producing means or operatively placed between said power control means and said at least one heat-producing means (col. 4, lines 45-57).

Referring to claims 3-5, Yoshida discloses the control system according to claim 1 wherein said power limiting function and said scaling function resides in a module operatively placed between a power source and said power control means (col. 4, lines 45-57). Yoshida discloses the control system according to claim 1 wherein said power limiting function and said scaling function resides in said power control means operatively placed between a power source and said at least one heat-producing means (col. 4, lines 45-57). Yoshida discloses the control system according to claim 1 wherein said power limiting function and said scaling function resides in a module operatively placed between the output of any control device and the control input to said power control means which controls said at least one heat-producing means (col. 4, lines 45-57).

Referring to claim 7, Yoshida discloses the control system according to claim 1 further comprising a temperature controller, said temperature controller including: a temperature sensing function such that a process temperature operatively associated with said at least one heat-producing means may be determined; a temperature comparison function for comparing a temperature associated with said at least one heat-producing means with a set point temperature and determining the required output (col. 5, lines 13-20 and 40-42); and an output function that provides, directly or through the use of an ancillary power control means, a method to vary the power supplied to the heat-producing means (col. 5, lines 56-61).

Referring to claims 37 and 38, Yoshida implicitly discloses the control system according

to claim 36 further comprising: at least one circuit protection device operatively associated with the power receiving device (col. 4, lines 34-48). Circuit breakers are common for temperature control systems. Yoshida discloses the control system according to claim 36 further comprising at least one filtering device operatively associated with the power receiving device to suppress high frequency component generation (col. 4, lines 34-48)

Allowable Subject Matter

- 4. Claims are 8-35 are allowed.
- 5. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R. Kasenge whose telephone number is 571 272-3743. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/644,719 Page 5

Art Unit: 2125

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CK March 6, 2006

> LEO PICARD SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100

L.P.P.